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Kansas Department of Health and Environment
Bureau of Air and Radiation
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Compliance
Handling of Asbestos-Containing Debris
Following Catastrophic Emergency Situations
Technical Guidance Document - BAR 2002-01

Purpose: To outline the practices of the Bureau of Air and Radiation concerning handling of asbestos-containing debris following catastrophic emergency situations.

Many houses, public and commercial buildings, industrial facilities, and other structures constructed prior to 1980 may contain asbestos-containing building materials (ACM). Asbestos is a naturally occurring fibrous mineral, which has been extensively used in building and construction materials. Asbestos comes in two forms, friable and non-friable. Friable asbestos is defined as any material that contains more than 1% asbestos, by weight, which is applied to ceilings, walls, structural members, piping, ductwork, or any other part of a building and which, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. The most common types of friable ACM are thermal insulation found on boilers and pipes and ductwork, acoustical treatments and fireproofing found on ceilings and walls. Non-friable forms of asbestos are floor tile, asphaltic materials, cementitious products used as siding, shingles and piping, and many other types of building materials. If the ACM is disturbed or crushed when housing or other building structures are damaged or destroyed during a windstorm, tornado, flood, or other unplanned event, asbestos fibers and dust are likely to be released into the air. Exposure to airborne asbestos fibers, through inhalation, has been linked to chronic diseases such as asbestosis and mesothelioma, including lung cancer.

After a catastrophic emergency strikes, the clean up and disposal of building rubble and debris from significantly damaged or demolished houses and buildings soon follows, as communities begin to return to normalcy. The ACM, which may be contained within the mixed rubble and debris from damaged and demolished houses and buildings, generally cannot be safely or effectively removed from the damaged building materials without risking the uncontrolled release of asbestos fibers and dust. As building rubble and debris are cleaned up, loaded and hauled away in tarped vehicles for disposal, the release of airborne asbestos fibers and dust can be minimized by following proper work practices. These practices include containing the ACM and wetting the material as an effective engineering control for decreasing the release of asbestos fibers and dust during clean up, hauling and disposal activities.

Disposal of these building materials from damaged and demolished houses, buildings and other structures must be at construction/demolition disposal sites approved by KDHE Bureau of Waste Management (BWM).

Under the federal Clean Air Act, the U.S. Environmental Protection Agency (EPA) regulates the removal, clean up, and disposal of friable, crushed or damaged ACM during normal or planned renovation or demolition of houses, buildings, and structures. These EPA regulations, known as the asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAP) standard (40 CFR Part 61, Subpart M), require using handling, and work practices which minimize the disturbance and release of airborne asbestos fibers and dust to the outside air. Consequently, the asbestos NESHAP regulations prohibit the burning of building materials, including rubble, debris and other waste. Burning would destroy the binding materials surrounding the asbestos fibers and dust (which do not burn) and subsequently cause the release of asbestos fibers and dust into the air. In Kansas, the KDHE enforces the asbestos NESHAP regulations (adopted by reference in K.A.R. 28-19-735) as well as the Kansas Asbestos Control Regulations (K.A.R. 28-50-1 through 14).

In the aftermath of catastrophic emergencies which generate damaged and demolished houses, buildings and other structures, the federal and state asbestos control regulations allow for the streamlined and expedited clean up and disposal of building rubble and debris which has a high probability of containing damaged ACM. Buildings, houses and other structures that are not significantly damaged, may require some renovations or subsequently be demolished must comply with all federal and state asbestos control regulations. These include requirements for inspections for ACM (where feasible), written 10 day pre-notification to KDHE (when feasible) prior to demolition; as well as work practices and procedures for the safe and effective removal of regulated ACM, and the disposal of ACM waste at an approved waste disposal site.

For further information regarding handling, safe removal, clean up, or disposal of asbestos-containing building materials, contact KDHE Bureau of Air and Radiation - Asbestos Control Unit at (785) 296-1689.

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